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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,193	10/31/2003	Davis-Dang Hoang Nhan	KCC 4984 (K-C 18,956)	3474
321 7590 03/28/2008 SENNIGER POWERS LLP ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102				
EXAMINER				
HAND, MELANIE JO				
ART UNIT		PAPER NUMBER		
3761				
NOTIFICATION DATE		DELIVERY MODE		
03/28/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com



### Office Action Summary

**Application No.**

10/699,193

**Applicant(s)**

NHAN ET AL.

**Examiner**

MELANIE J. HAND

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 15, 16 and 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17-21, 114 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed December 31, 2007 have been fully considered but they are not persuasive.

With respect to arguments regarding claim 1: Applicant argues that Hasse fails to teach or suggest a stretchable substrate as recited in claim 1 and examiner's position that Hasse teaches polyethylene and polypropylene which are elastomeric materials is not sufficient. This is not persuasive because Hasse explicitly teaches "thermoplastic films of polyethylene or polypropylene", thus explicitly making the distinction of which polyethylene or polypropylene is used as the backsheet material, i.e. the stretchable substrate. Thermoplastic polyethylene is stretchable because it is an elastomeric material. Applicant further argues that Hasse implies that the backsheet is stretchable because the leg cuffs are free from the backsheet so that the backsheet does not inhibit the leg cuffs. This statement only implies that the backsheet is less stretchable than the leg cuffs, not that the backsheet is non-stretchable. Applicant further argues that Hasse fails to teach or suggest a layer of superabsorbent applied to and held by an adhesive composition. Applicant's support for this argument is that Hasse does not teach an absorbent core that is only superabsorbent polymer. This is not persuasive because Hasse teaches in the fact that "the absorbent core 28 may be manufactured...from a wide variety of liquid absorbent materials...such as superabsorbent polymers or absorbent gelling materials" ('429, Col. 19, lines 17-28) which are particulate absorbent materials. Applicant acknowledges this teaching but then argues that superabsorbents are most often used in absorbent cores in combination with other materials and cites patents incorporated by reference by Hasse to illustrate the point. This may be true, however Hasse is also clearly teaching a core 28 as being



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a layer of one material, that material being a superabsorbent material. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. See *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). ". A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments, Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) Applicant further argues that adhering the layer of particulate superabsorbent to the backsheet does not anticipate claim 1, but then continues to argue in support of this position referring only to the previous argument that the absorbent material is not only superabsorbent and thus cannot be applied or held by the backsheet. As this argument is based upon applicant's previous argument that Hasse does not teach a core that is only superabsorbent, and this argument has been addressed and is not persuasive, this argument is also not persuasive.

With respect to arguments regarding claim 19: Applicant's argument regarding claim 19 appears to be based upon applicant's argument regarding claim 1, specifically that the polypropylene or polyethylene films taught by Hasse are not stretchable and thus cannot elastic. This argument is not persuasive for reasons stated *supra* with respect to claim 1.

With respect to arguments regarding claim 21: Applicant argues that Hasse does not teach a second layer of superabsorbent being applied to and held by a second layer of adhesive. This is not persuasive because Hasse teaches in Col. 21, lines 42-52 that the topsheet 24 is separately manufactured and inserted as part of the absorbent assembly 22 onto the chassis. If one were to keep the nomenclature consistent between claims 1 and 21 and with respect to the elements of Hasse that anticipate the claims, the first layer of adhesive would still



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be attaching particles from the core 28 to the backsheet 26, as the backsheet 26 has already been formed as part of the assembly 22 prior to addition of the topsheet by adhesion to core 28. Hasse teaches in Col. 21, lines 9-12 that this manufacturing of the topsheet 24 as part of the assembly 22 is accomplished by attaching topsheet 24 to core 28 by the same means as core 28 is attached to backsheet 26, i.e. by adhesive, specifically the second adhesive layer as claimed. Topsheet 24 is attached to some (not all) particles of the superabsorbent core 28, as applicant is no doubt aware that no adhesive holds all superabsorbent particles in place immediately and there will be loose particles that did not adhere to the first layer of adhesive. Therefore, this second layer of adhesive will hold a number of loose particles of core 28 that will define a second layer of superabsorbent.

2. Applicants' arguments with regard to dependent claims 2-14, 17-22 and 114 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasse et al (U.S. Patent No. 5,496,429).

With respect to **Claim 1**: Hasse teaches an absorbent article 20 comprising: a stretchable substrate 26 and an absorbent composite 28 comprising a layer of adhesive composition in



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contact with the stretchable substrate 26 and a layer of particulate superabsorbent material applied to and held by the adhesive composition, the absorbent composite 28 being secured to the substrate 26 by the adhesive composition. (Col. 20, lines 20-25)

With respect to **Claim 2**: Stretchable substrate 26 is a first stretchable substrate. Article 20 taught by Hasse further comprises a second stretchable substrate 24 in generally superposed relationship with the first stretchable substrate 26 whereby the absorbent composite 28 is disposed between said first and second stretchable substrates 26,24, respectively. (Col. 20, lines 63-65, Col. 21, lines 9-14)

With respect to **Claim 3**: The layer of adhesive composition taught by Hasse is a first layer of adhesive composition, the absorbent article 20 further comprising a second layer of adhesive composition applied to the layer of particulate superabsorbent material defining composite 28. (Col. 21, lines 9-14)

With respect to **Claim 4**: The stretchable substrate 26 is a first stretchable substrate, the absorbent article 20 further comprising a second stretchable substrate 24 in generally superposed relationship with the first stretchable substrate 26 and secured to the second layer of adhesive composition to thereby secure the absorbent composite 28 to said second stretchable substrate 24. (Col. 21, lines 9-14)

With respect to **Claim 17**: Absorbent composite 28 further comprises hydrophilic fibers. (Col. 19, lines 17-32)



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With respect to **Claim 18**: Absorbent composite 28 has a width and a length (Fig. 2), said absorbent composite 28 having a non-uniform basis weight across at least a portion of at least one of the width and the length of said absorbent composite 28. (Col. 19, lines 29-32)

With respect to **Claim 19**: Stretchable substrate 26 is elastic. (Col. 20, lines 48-53)

With respect to **Claim 20**: Stretchable substrate 26 defines an outer cover of the absorbent article 20, the absorbent article 20 further comprising a liquid permeable liner 24 in generally superposed relationship with the outer cover and adapted for contiguous relationship with the wearer's skin, the absorbent composite 28 being disposed between the liner 24 and the outer cover. (Col. 20, lines 63-65, Col. 21, lines 9-14)

With respect to **Claim 21**: The layer of adhesive composition taught by Hasse is a first layer of adhesive composition and the layer of particulate superabsorbent material is a first layer of particulate superabsorbent material, the absorbent article 20 further comprising a second layer of adhesive composition applied to the first layer of particulate superabsorbent material (on its topsheet-facing side), a second layer of particulate superabsorbent material included as part of the absorbent composite 28 being applied to and held by the second layer of adhesive composition. (Col. 20, lines 20-25, Col. 21, lines 9-14) Specifically, topsheet 24 is separately manufactured and inserted as part of the absorbent assembly 22 by attaching topsheet 24 to the composite structure of backsheet 26 and core 28 via a second adhesive layer. If one were to keep the nomenclature consistent between claims 1 and 21 and with respect to the elements of Hasse that anticipate the claims, the first layer of adhesive would still be attaching particles from the core 28 to the backsheet 26, as the backsheet 26 has already been formed as part of the



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assembly 22 prior to addition of the topsheet by adhesion to core 28. Topsheet 24 is attached to some (not all) particles of the superabsorbent core 28, as applicant is no doubt aware that no adhesive holds all superabsorbent particles in place immediately and there will be loose particles that did not adhere to the first layer of adhesive. Therefore, this second layer of adhesive will hold a number of loose particles of core 28 that will define a second layer of superabsorbent because they are attached to a layer or adhesive. (Col. 20, lines 23-25)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 5-14 and 114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasse et al ('429) in view of Jiang et al ('614).

With respect to **Claim 5**: Hasse does not explicitly teach that the adhesive composition comprises a hot-melt adhesive. An absorbent article as set forth in claim 1 wherein the adhesive



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composition comprises a hot-melt adhesive. Jiang teaches an adhesive composition that is a hot melt adhesive. Jiang teaches that said hot-melt composition has a long opening time at processing temperature and faster set time at lower temperatures ('614, ¶ 0107) therefore it would be obvious to one of ordinary skill in the art to modify the article of Hasse by substituting said adhesive composition with a hot melt adhesive composition as taught by Jiang such that the adhesive sets quickly at room temperature.

With respect to **Claims 6-10**: Jiang teaches that the adhesive composition has a viscosity less than 8,000 mPa-s (8,000 cP) at 190 degrees Celsius, therefore the viscosity will also be less than 10,000 cP at 204 (claim 6), 149 (claim 7) and 121 degrees Celsius (claim 8). Thus the adhesive composition will also have a viscosity at 149 degrees Celsius that falls within the range set forth in claim 9. With respect to claim 10, Jiang teaches that the viscosity could be less than 6,000 mPa-s (cP) at 190 degrees Celsius, which would also be less than 6,000 cP at 149 degrees Celsius and therefore falls within the range set forth in claim 10

With respect to **Claims 11-14**: Jiang teaches that the adhesive composition has a storage modulus of 0.001-1 Mpa ( $10^5 - 10^7$  dynes/cm<sup>2</sup>) at 25 degrees Celsius.

With respect to **claim 114**: The adhesive composition of Jiang comprises at least one tackifier, said at least one tackifier comprising between 1-80 wt % of the blend (composition), which overlaps the claimed range of about 30 to about 65 percent by weight of the adhesive composition. The motivation to combine the teachings of Hasse and Jiang is stated *supra* with respect to claim 5.



***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie J Hand/  
Examiner, Art Unit 3761

/Tatyana Zalukaeva/  
Supervisory Patent Examiner, Art Unit 3761